

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of claims:

Please cancel claims 1-8 without prejudice or disclaimer of the subject matter set forth therein.

1-8. (canceled)

9. (withdrawn - currently amended) A method for producing a protein comprising the steps of:

introducing, into a host cell producing virus particles, a recombinant vector in which a fusion gene-polynucleotide sequence ~~containing comprising a gene~~ first polynucleotide encoding a protein having a plurality of membrane-spanning segments and a gene-second polynucleotide encoding a desired protein is incorporated;

expressing said fusion gene-polynucleotide sequence in said host cell to produce said desired protein fused with said protein having a plurality of membrane-spanning segments, the produced fusion protein being bound to said virus particle; and

recovering said virus particle to which said fusion protein comprising said desired protein is bound.

10. (withdrawn - currently amended) The method according to claim 9, wherein said fusion gene-polynucleotide sequence comprises, in the order mentioned from upstream end, said gene-first polynucleotide encoding said protein having a plurality of membrane-spanning segments and said gene-second polynucleotide encoding said desired protein.

11. (withdrawn) The method according to claim 10, wherein said virus is baculovirus and said host cell is an insect cell.

12. (withdrawn) The method according to any one of claims 9 to 11, wherein said fusion protein is bound to said virus particle such that at least an active region of said desired protein is exposed to the outside of said virus particle.

13. (withdrawn) The method according to claim 9, wherein said protein having a plurality of membrane-spanning segments is a protein having an odd number of membrane-spanning segments, and said desired protein does not have a membrane-spanning segment.

14. (withdrawn) The method according to claim 13, wherein said protein having a plurality of membrane-spanning segments is a chemokine receptor CCR3.

15. (withdrawn) The method according to claim 9, further comprising the steps of cleaving the recovered fusion protein to separate said desired protein from said protein having a plurality of membrane-spanning segments, thereby detaching said desired protein from said virus particle; and recovering the separated desired protein.

Please add the following new claims

16. (new) A method for producing a low to medium molecular weight fusion protein comprising the steps of:

introducing into an insect cell a recombinant vector in which a fusion polynucleotide sequence comprising a first polynucleotide encoding a coat protein of a baculovirus and a second polynucleotide encoding a desired protein is incorporated wherein said first polynucleotide is to a 5' side of said second polynucleotide encoding said desired protein;

expressing said polynucleotide sequence in said insect cell to produce said fusion protein; and

recovering said fusion protein.

17. (new) The method of claim 16, wherein the coat protein of baculovirus is gp64.

18. (new) The method of claim 16, wherein said desired protein is glycosyltransferase.

19. (new) The method of claim 17, wherein said desired protein is glycosyltransferase.

20. (new) A method for producing a low to medium molecular weight fusion protein comprising the steps of:

introducing into an insect cell a recombinant vector comprising a fusion polynucleotide sequence comprising a first polynucleotide encoding a protein constituting a virus particle and a second polynucleotide encoding a desired protein, wherein said first polynucleotide is to a 5' side of said second polynucleotide encoding said desired protein, and wherein said polynucleotide encoding a protein constituting a virus particle and said polynucleotide encoding said desired protein has been isolated and amplified by one or more primers selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, and SEQ ID NO: 13;

expressing said polynucleotide sequence in said insect cell to produce the low to medium molecular weight fusion protein; and

recovering said fusion protein.

21. (new) The method of claim 20, wherein said protein constituting a virus particle is gp64.
22. (new) The method of claim 20, wherein said desired protein is glycosyltransferase.
23. (new) The method according to claim 16, wherein said desired protein is fused with said virus particle such that at least an active region of said desired protein is exposed to the outside of said virus particle.
24. (new) The method according claim 16, further comprising the steps of cleaving the recovered fusion protein to separate said desired protein from said virus particle; and recovering the separated desired protein.